

CHICAGO

Electric Power Tools

14" HEAVY DUTY CUT-OFF SAW

Model 47003

ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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For technical questions and replacement parts, please call 1-800-444-3353

PRODUCT SPECIFICATIONS



Item	Description
Electrical Requirements	120V / 60 Hz / 15 AMPs Rated; 3 HP Peak / Single Phase; 3,750 No Load RPM; 3 Prong Electrical Plug; 14 Gauge Electrical Cord
Maximum Cut-Off Wheel Diameter	14"
Recommended Cut-Off Wheel Types	14" Cut-Off Wheel for Metal (SKU #44814) 14" Cut-Off Wheel for Masonry (SKU #44815)
Arbor Size	1"
Base Dimensions	18" x 10-1/4"
Fence Dimensions	6-5/8" x 2-3/8"
Left/Right Miter Guide	0-45° Adjustable
Maximum Stock Height	4"
Maximum Stock Width	7-3/8"
Overall Dimensions	22-3/4" x 18-1/2" x 11"
Weight	26.8 Pounds

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts List on page 17** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES



WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed in the following
pages may result in electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite flammables.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
4. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
6. **Use safety equipment. Always wear ANSI approved safety glasses under a full face shield, a dust mask/respirator, and hearing protection during use.**

TOOL USE AND CARE

1. **Use clamps or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand is unstable and may lead to loss of control. Only work on a workpiece that is properly secured by tightening the Clamping Screw (4).

2. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
4. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care.** Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
7. **Check for misalignment or binding of moving parts, breakage of parts, cracking or breakage of the Cut-Off Wheel, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
8. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.



SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

ELECTRICAL SAFETY

1. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or

break down, grounding provides a low resistance path to carry electricity away from the user.

2. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
3. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
4.  **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
5. **Do not abuse the Power Cord. Never use the Power Cord to carry the tool or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
6. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

GROUNDING



WARNING!

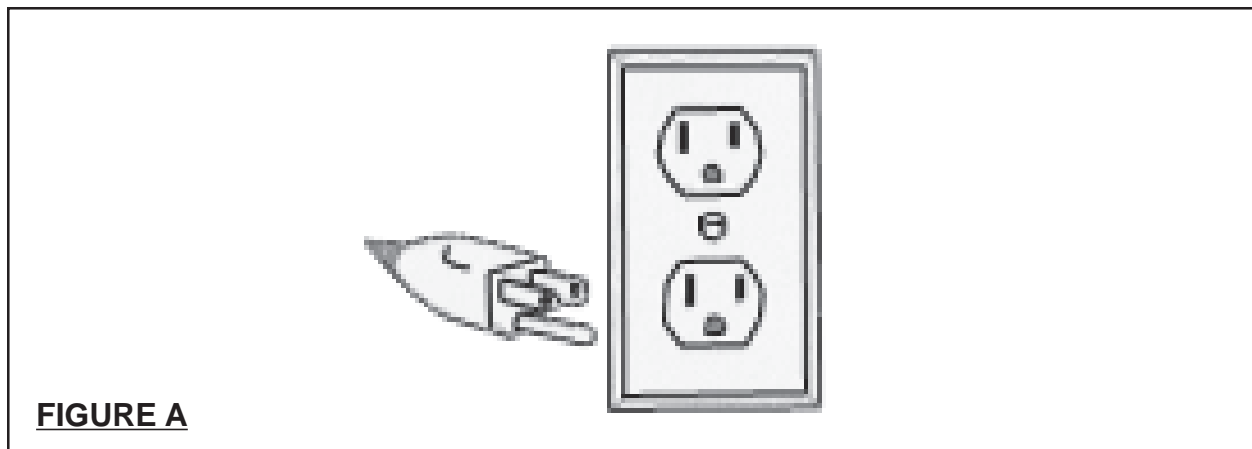
Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low

resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**

2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**



EXTENSION CORDS

1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure B, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure B.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure B.)**

5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size.
(See Figure B.)
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-
* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.					

FIGURE B

SYMBOLOLOGY








	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
V ~	Volts Alternating Current
A	Amperes
n_o xxxx/min.	No Load Revolutions Per Minute (RPM)

FIGURE C

SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Cut-Off Saw.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2.  **Keep hands and fingers away from cutting area and Cut-Off Wheel. Keep one hand on the Handle and your second hand on the motor housing.** If both hands are holding the saw, your hands and fingers cannot be cut by the Cut-Off Wheel.
3. **Do not reach under the Base of the Cut-Off Saw.** The Swing Guard can not protect you from the Cut-Off Wheel below the Base.
4. **Check Swing Guard for proper closing before each use. Do not operate the Saw if the Swing Guard does not move freely and close instantly. Never clamp or tie the Swing Guard into the open position.** If the Saw is accidentally dropped, the Swing Guard may be bent. Raise the Swing Guard and make sure it moves freely and does not touch the Cut-Off Wheel or any other part, in all depths of cut.
5. **The Swing Guard should be retracted manually only for special cuts such as “Pocket Cuts” and “Compound Cuts.” Raise the Swing Guard only enough to begin the cut. As soon as the Cut-Off Wheel enters the material, the Swing Guard must be released.** For all other sawing, the Swing Guard should be allowed to operate automatically.
6. **The Saw is not to be used for any cutting operation in the locked down position.** The Saw should be in the locked down position only for carrying and storage.
7. **Always use Cut-Off Wheels with a 14” Diameter, 1” round arbor hole, and rated at a minimum of 4,000 RPM.** Cut-Off Wheels that do not match the mounting hardware of the Saw or that are rated at less than the saw's maximum RPM may fly off the Saw or may run eccentrically, causing loss of control.
8. **Never use damaged or incorrect Cut-Off Wheel washers or bolts.** The Cut-Off Wheel's washers and bolt were specially designed for your Saw, for optimum performance and safety of operation.
9. **Do not use the included Cut-Off Wheel to cut aluminum, copper, brass, or other non-ferrous metals.** The included Cut-Off Wheel is designed to cut only ferrous (iron containing) metals such as steel alloys and cast iron. If using other Cut-Off Wheels, only use them on materials that the manufacturer recommends.


10. **To avoid accidental injury, always wear heavy duty work gloves and work bib when changing a Cut-Off Wheel.**
11. **Before using the Cut-Off Saw, make sure the Cut-Off Wheel is properly mounted on the Saw Spindle.** Make sure the Cut-Off Wheel is balanced, and is not cracked or bent.
12. **The Cut-Off Wheel will become hot while cutting.** Allow the Cut-Off Wheel to completely cool before touching.
13. **Allow the Cut-Off Wheel to spin up to full speed before feeding it into the workpiece.** When turning off the Saw, allow the Cut-Off Wheel to spin down and stop on its own. Do not press against the Cut-Off Wheel to stop it.
14. **Do not force the Cut-Off Wheel into the workpiece when cutting.** Apply moderate pressure, allowing the Cut-Off Wheel to cut without being forced.
16. **Industrial applications must follow OSHA requirements.**
17. **Always turn off the Cut-Off Saw and unplug the Power Cord from its electrical outlet before changing accessories or performing any inspection, maintenance, or cleaning procedures.**
18. **Use the right tool or attachment for the right job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool or attachment. There are certain applications for which this product was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this product, and do not use this product for a purpose for which it was not intended.
19.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (*California Health & Safety Code 25249.5, et seq.*)
20. **Always locate the Cut-off Saw on a level, flat work surface capable of supporting the solid weight of the saw, workpiece and related tools.**

20.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
21.  **WARNING!** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

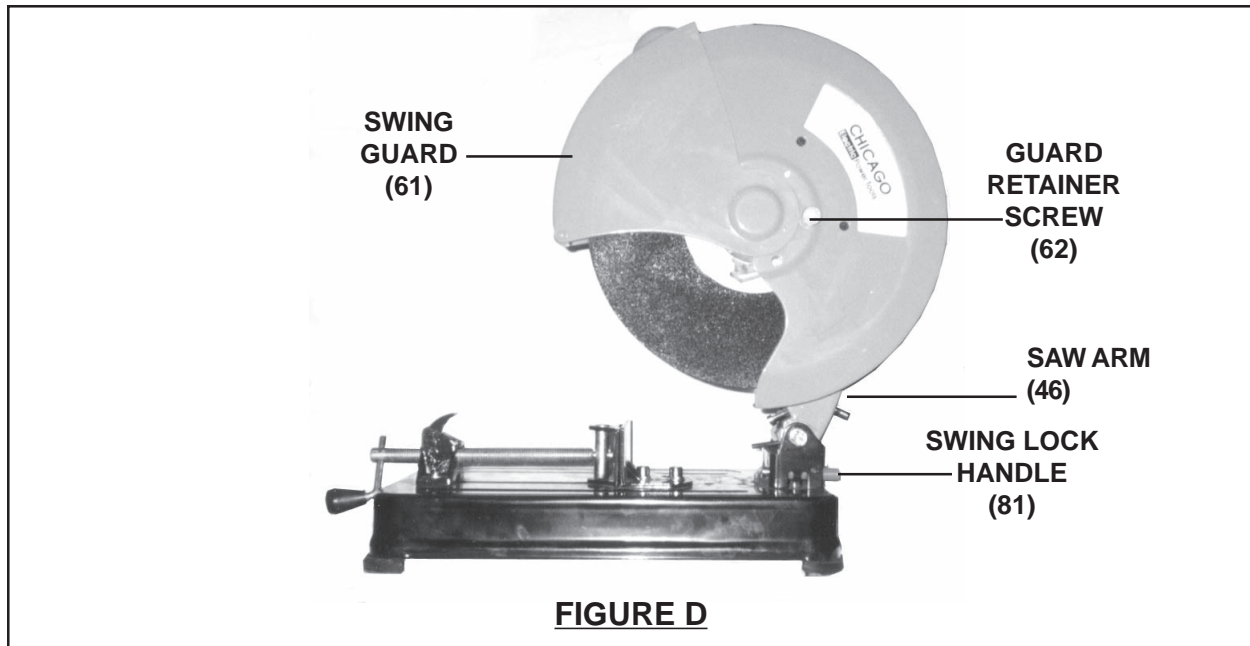
ASSEMBLY AND OPERATING INSTRUCTIONS

NOTE: For additional references to the parts listed in the following pages, refer to the **Assembly Diagram on page 18.**

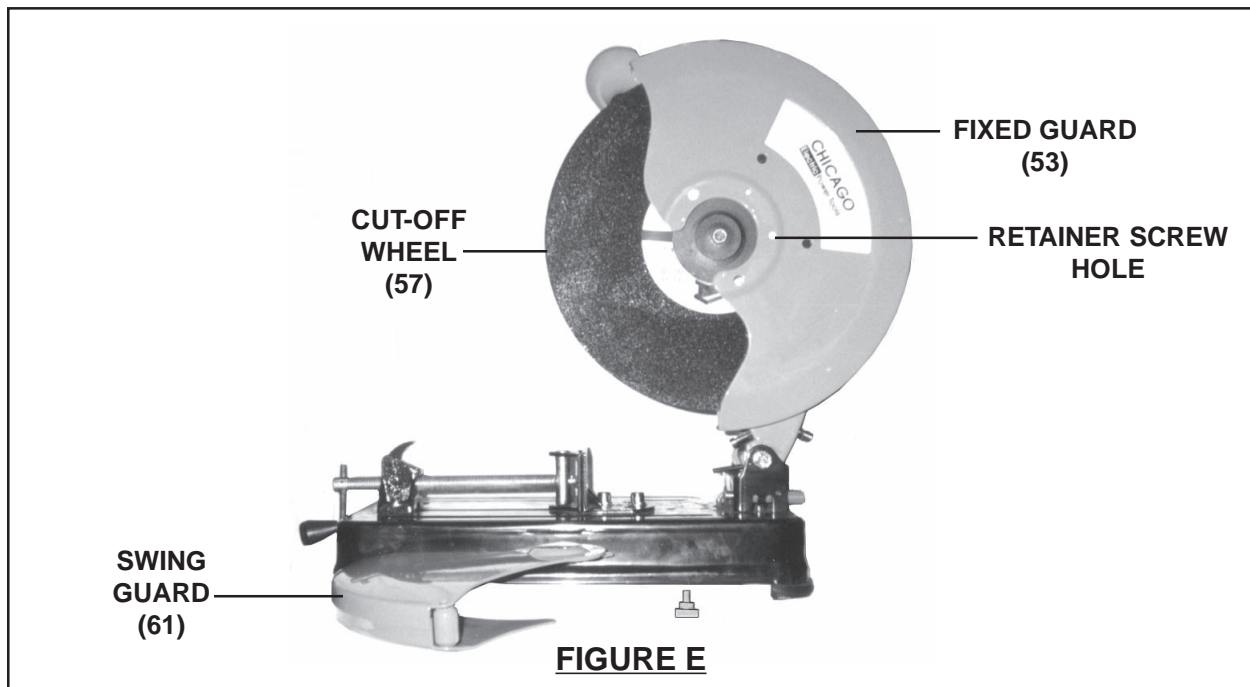
To Remove Or Install A Cut-Off Wheel:

1.  **WARNING!** Prior to performing any assembly procedures, make sure the **Power Cord (65)** of the Cut-Off Saw is unplugged from its electrical outlet. Also, make sure the **Cut-Off Wheel** has completely cooled and wear work gloves while replacing the **Wheel**.
2. Place the Cut-Off Saw in its fully raised position. To do so, turn the **Swing Lock Handle (81)** clockwise while pushing down on the **Handle (66, 71)**.
(See Figure D, next page.)

3. Unscrew and remove the Guard Retainer Screw (62). **(See Figure D.)**



4. Remove the Swing Guard (61). Then, set the Swing Guard aside, making sure not to allow it to be bent or damaged; that can interfere with proper guard operation. **(See Figures D and E.)**

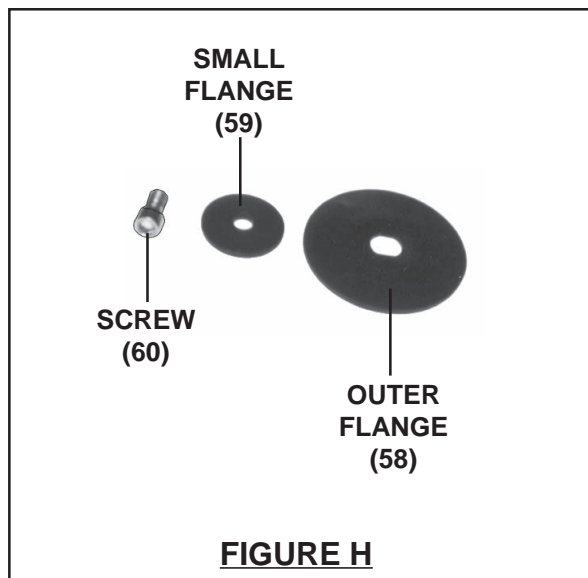
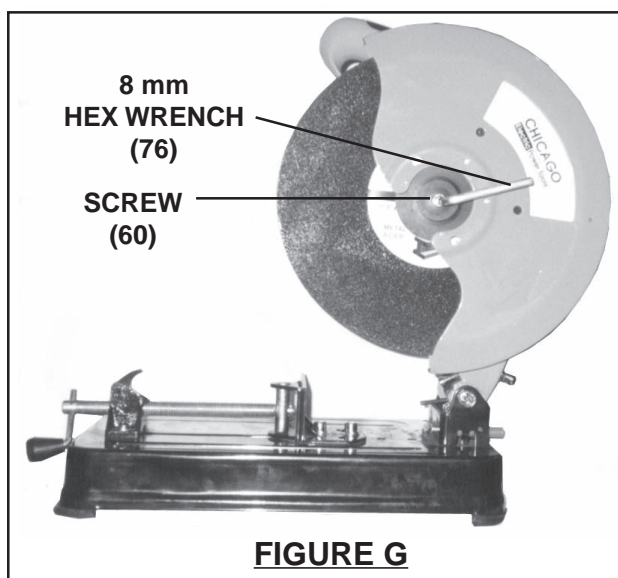
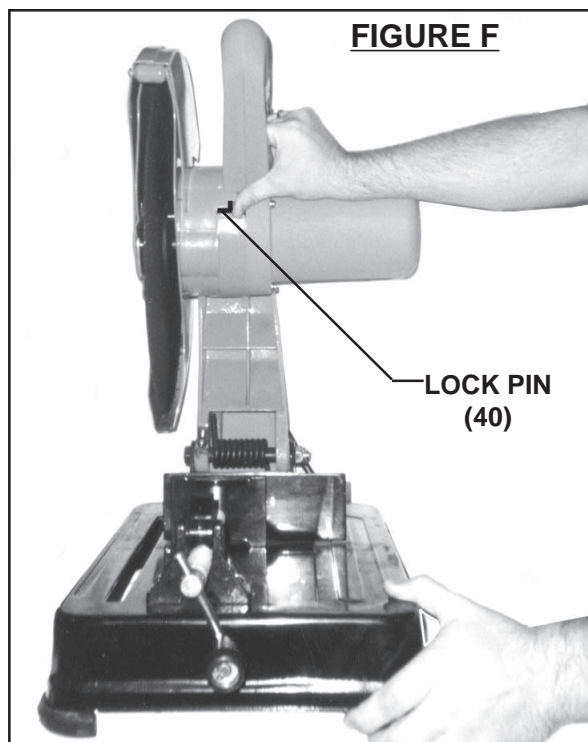


5. To keep the Cut-Off Wheel (57) from turning: Depress the Lock Pin (40) and turn the Cut-Off Wheel until the Lock Pin clicks into place. **(See Figure E, and Figure F, next page.)**

6. Use the 8mm Hex Wrench (76) to remove the Screw (60).
NOTE: Make sure to turn the Screw *counterclockwise* to remove.
(See Figure G.)
7. Remove the Small Flange (59). Then, remove the Outer Flange (58).
(See Figures G and H.)
8. Remove the old Cut-Off Wheel (57), and replace it with a new Cut-Off Wheel.



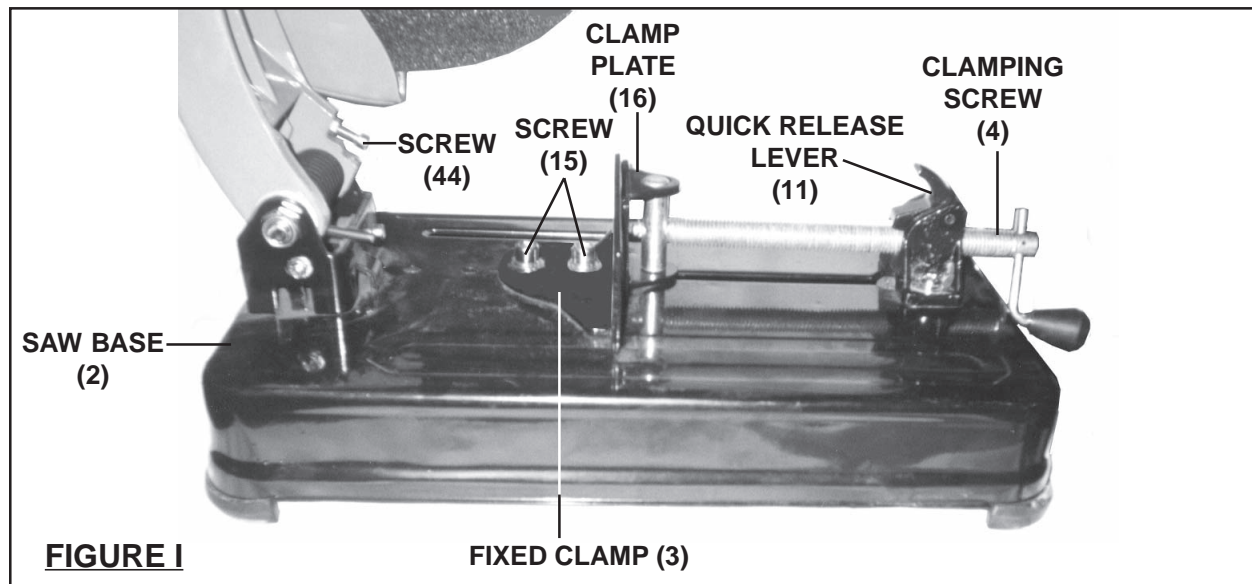
CAUTION! Use a 14" diameter Cut-Off Wheel with a 1" round Arbor hole, and rated at a minimum of 4,000 RPM. Cut-Off Wheels that do not match the mounting hardware of the Saw or that are rated at less than the saw's maximum RPM may fly off the Saw or may run eccentrically, causing loss of control.



9. Reinstall the Outer Flange (58) (with the concave side facing the Wheel), Small Flange (59), and Screw (60). **NOTE:** Make sure to firmly tighten the Screw in a *clockwise* direction while depressing the Lock Pin (40). (See Figures G and H.)
10. Reinstall the Swing Guard (61), and secure it in place with the Guard Retainer Screw (62). **Make sure to tighten the Screw in the screw hole referred to in Figure D.** (See Figures D and E.)

The Quick Lock Vise:

1. The Quick Lock Vise allows for the angle of cut to be adjusted from 0 to 45 degrees to the left and 0 to 45 degrees to the right. To adjust the angle of cut, loosen the two Screws (15). Move the Fixed Clamp (3) to the desired angle as indicated by the line on the Base (2) of the Cut-Off Saw. Then, retighten the two Screws. **(See Figure I.)**
2. The Quick Lock Vise features a Quick Release Lever (11) which allows the operator to quickly release from the Vise the workpiece being cut. To use the Quick Release Lever, pull the lever rearward to disengage the threads. Slide the clamp forward until it contacts the workpiece. Lower the release lever, then tighten by turning the handle clockwise. To remove the workpiece, loosen the Clamping Screw slightly. Raise the Quick Release Lever and pull back on the Clamping Screw. **(See Figure I.)**



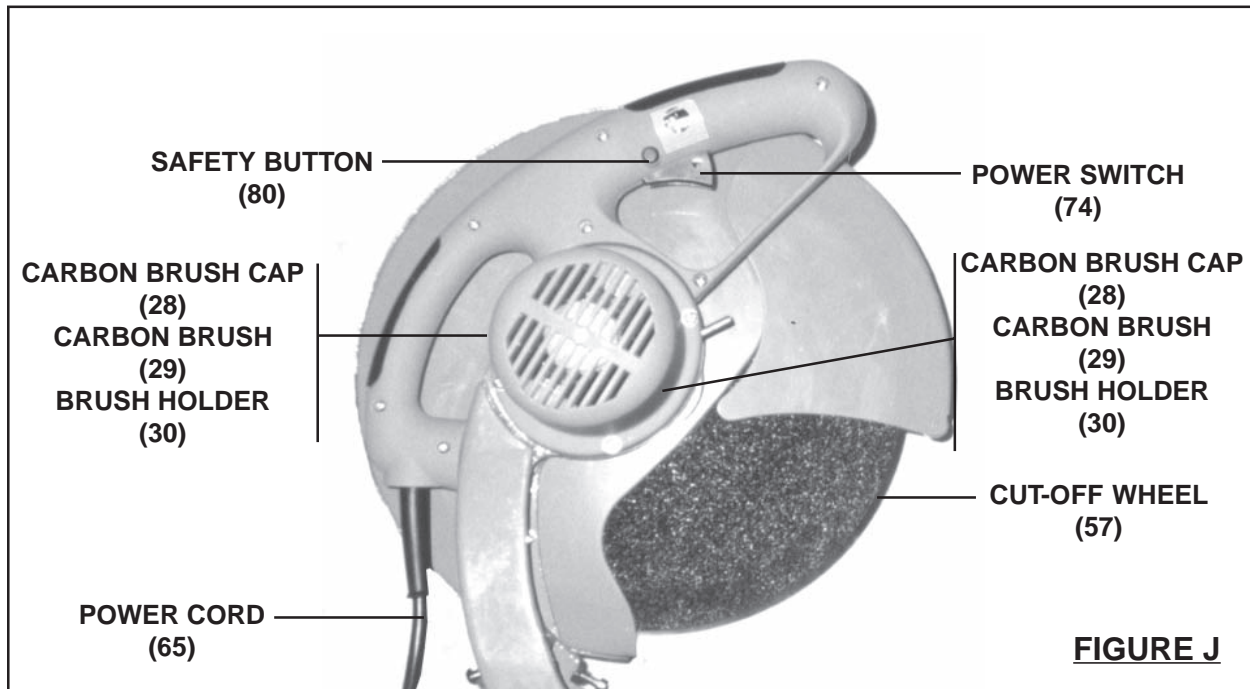
To Adjust The Depth Of Cut:

1. The depth of cut may be adjusted, using the Screw (44).
To cut shallower: Turn the Screw *counterclockwise*. Then, tighten the Hex Nut.
To cut deeper: Loosen the Hex Nut and turn the Screw *clockwise*. Then, tighten the Hex Nut. **(See Figure I.)**

To Operate The Cut-Off Saw:

1. To operate the Cut-Off Saw, first make sure the Saw Arm (46) is in its the upright position with the Swing Lock Handle (81) disengaged. **(See Figure D.)**


2. If necessary, adjust the angle of cut. Then, secure the workpiece in the Quick Lock Vise. **(See Figure I.)**
3. Plug the Power Cord (65) into the nearest 120 volt, grounded, electrical outlet. Depress the Safety Button (80) with your thumb, and squeeze the Power Switch (74) on the Handle (66, 71). Then, release the Safety Button. **(See Figure J.)**



4. Allow the Cut-Off Wheel (57) to spin up to full speed. Then, *slowly* lower the Cut-Off Wheel (57) into the workpiece. **(See Figures D, and J.)**
5. If the Cut-Off Wheel (57) does not pass completely through the workpiece, Raise the Saw Arm, turn off and unplug the Saw, and wait until it comes to a complete stop. Remove stock being cut. Then, lower the Cut-Off Wheel, following the instructions on page 13. **(See Figure I.)**
6. After adjusting the Screw (44), press down on the Cut-Off Saw and make sure the Cut-Off Wheel (57) does not contact the bottom of the Saw Base (2) or any other part of the Saw Base. **(See Figure I.)**
7. If the Cut-Off Wheel (57) touches the Saw Base (2) or any other part of the Saw Base, raise the Cut-Off Wheel until it clears, following the instructions on page 13. **(See Figure I.)**
8. Plug the Cut-Off Saw back into its electrical outlet, and finish making the cut following Steps #3 and #4 above.

9. Once the cut is completed, turn off the Cut-Off Saw by releasing the Power Switch (74). This allows the Safety Button (80) to return to the “OFF” position. **(See Figure J.)**
10. Unplug the Cut-Off Saw from its electrical outlet, and make sure to wait until the Saw has come to a complete stop before removing the workpiece.
11. Lock down the Saw with the Swing Lock Handle (81) and store the Saw in a dry, safe location.

INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Always make sure the Power Switch (74) is in its “OFF” position, and unplug the Power Cord (65) from its 120 volt electrical outlet before performing any inspection, adjustments, maintenance, or cleaning.
2. **Before each use**, inspect the general condition of the Cut-Off Saw. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, loose, cracked, or bent Cut-Off Wheel (57), and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use.
Do not use damaged equipment.
3. **Daily:** With a soft brush, cloth, or vacuum, remove all dust and debris from the Cut-Off Saw. Then, use a premium quality, lightweight machine oil to lubricate all moving parts, except the Cut-Off Wheel itself.
4. **To replace the Motor Carbon Brushes:** It may become necessary at some-time to replace the *two* Carbon Brushes (29) when the Motor performance decreases, or stops working completely. **The Carbon Brushes are located on each side of the Motor Housing (27).** To do so, use a standard screwdriver (not included) to remove the two Carbon Brush Caps (28). Then, remove the two Carbon Brushes from the Brush Holders (30). If the Carbon Brushes are worn down more than 1/2 of the original size, replace *both* Carbon Brushes. If, however, the Carbon Brushes are just dirty they may be cleaned by rubbing them with a pencil eraser. When installing the Carbon Brushes, make sure the carbon portion of the Carbon Brushes contact the Motor Armature, and that the springs face away from the Motor. Also, make sure the springs operate freely. After cleaning or replacement, replace the Carbon Brush Caps with a screwdriver and tighten firmly.
NOTE: New Carbon Brushes tend to arc or spark when first used *until* they wear and conform to the Motor’s Armature.
(See Figure J.)

PLEASE READ THE FOLLOWING CAREFULLY
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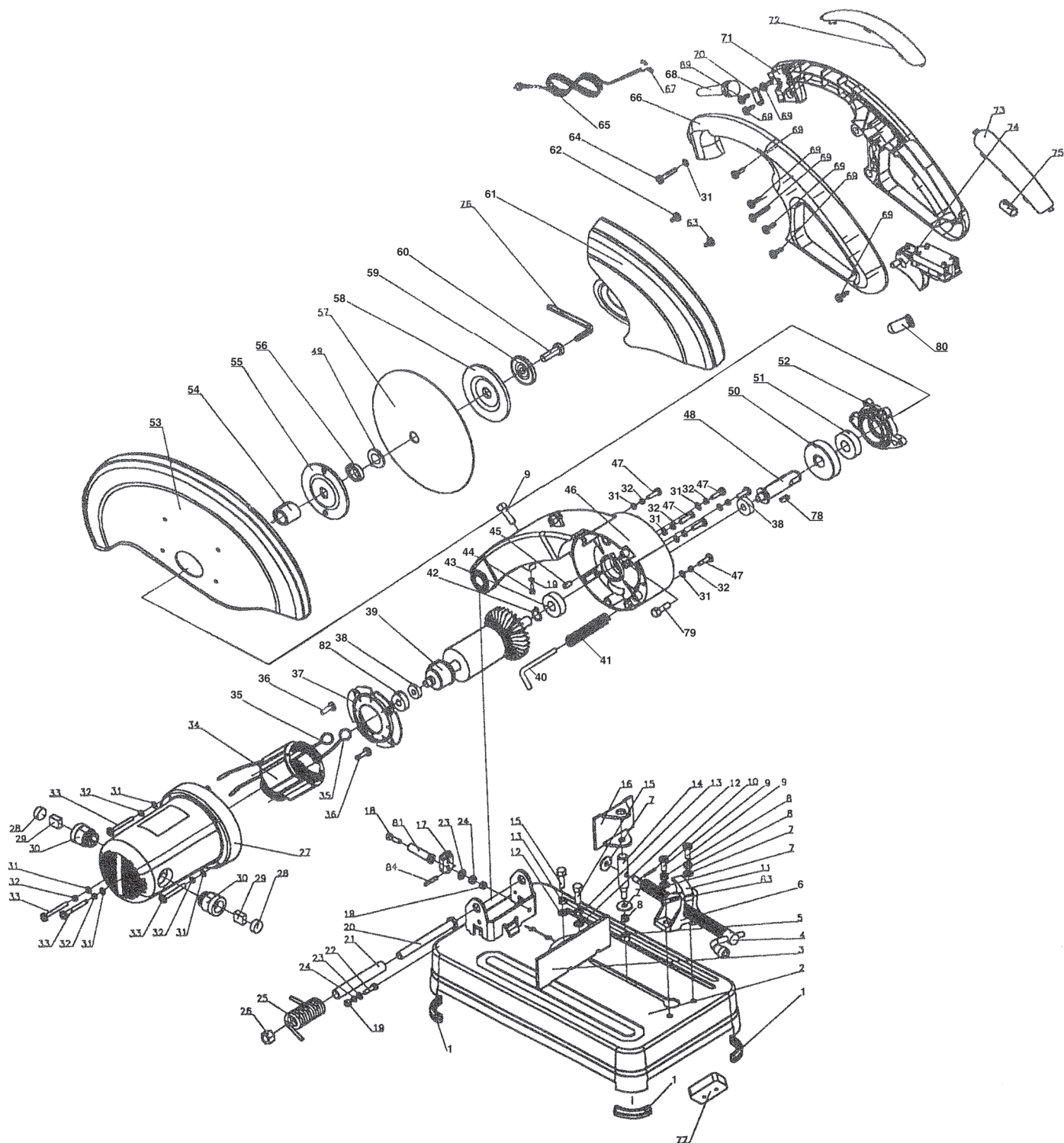
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST

Part #	Description	Qty.	Part #	Description	Qty.
1	Rubber Foot	4	43	Bearing	1
2	Base	1	44	Screw	1
3	Fixed Clamp	1	45	Rubber Cylinder	1
4	Clamping Screw	1	46	Saw Arm	1
5	Nut	1	47	Screw	6
6	Clamping Nut Body	1	48	Shaft	1
7	Washer	5	49	O-Ring	1
8	Spring Washer	5	50	Gear	1
9	Screw	3	51	Bearing	1
10	Cotter Pin	1	52	Bearing Holder	1
11	Quick Release Lever	1	53	Fixed Guard	1
12	Washer	2	54	Spacer	1
13	Spring Washer	2	55	Inner Flange	1
14	Pin Shaft	1	56	Gasket	1
15	Screw	2	57	Cut-Off Wheel (for metal)	1
16	Clamp Plate	1	58	Outer Flange	1
17	Swing Lock	1	59	Small Flange	1
18	Screw	1	60	Screw	1
19	Hex Nut	3	61	Swing Guard	1
20	Hex Bolt	1	62	Guard Retainer Screw	1
21	Spring Support	1	63	Screw	1
22	Inner Hex Bolt	1	64	Screw	1
23	Washer	2	65	Power Cord	1
24	Spring Washer	2	66	Left Handle	1
25	Spring	1	67	Terminal	3
26	Nut	1	68	Rubber Sleeve	1
27	Housing	1	69	Screw	9
28	Carbon Brush Cap	2	70	Cord Plate	1
29	Carbon Brush	2	71	Right Handle	1
30	Brush Holder	2	72	Cushion 1	1
31	Washer	10	73	Cushion 2	1
32	Spring Washer	10	74	Power Switch	1
33	Screw	4	75	Terminal	1
34	Stator	1	76	8MM Hex Wrench	1
35	Terminal	2	77	Balance Block	1
36	Screw	2	78	Key	1
37	Guide	1	79	Screw	1
38	Bearing	2	80	Safety Button	1
39	Armature	1	81	Swing Lock Handle	1
40	Lock Pin	1	82	Rubber Cushion	1
41	Pin Spring	1	83	Spring Column	1
42	C-Clip	1	84	Spring Column	1

NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM



NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.